

Amendment to the Claims:

This listing of claims set forth below replaces all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1 (currently amended): An engine performance demonstration unit, comprising:
a mobile carrier;
an engine mounted to said mobile carrier;
aftermarket apparatus for use with said engine to affect the operation of said engine; and
5 a switch mechanism for switching said aftermarket apparatus into operation and out of
operation to thereby affect said engine accordingly.

Claim 2 (original): The engine performance demonstration unit of claim 1, further including a
visual display for visually showing the difference in operation of the aftermarket apparatus when
operational and nonoperational.

Claim 3 (original): The engine performance demonstration unit of claim 2, wherein said visual
display comprised two visual displays, one visual display showing an engine performance parameter
when the aftermarket apparatus is not operational, and a second visual display showing the engine
performance parameter when the aftermarket apparatus is operational.

Claim 4 (original): The engine performance demonstration unit of claim 2, wherein said visual
display displays a flow rate of fuel to said engine.

Claim 5 (original): The engine performance demonstration unit of claim 2, wherein said visual
display displays a parameter related to a pollutant emitted by said engine.

Claim 6 (original): The engine performance demonstration unit of claim 1, wherein said aftermarket apparatus comprises a magnet that influences the molecules of the fuel.

Claim 7 (original): The engine performance demonstration unit of claim 1, wherein said switch mechanism comprises a valve for switching fuel.

Claim 8 (original): The engine performance demonstration unit of claim 1, wherein said switch mechanism comprises an articulated mechanism for holding a plurality of magnet assemblies, said articulated mechanism is hinged for operation for moving said magnet assemblies into and out of magnetic influence with a fuel line.

Claim 9 (original): The engine performance demonstration unit of claim 8, wherein said articulated mechanism includes a plurality of segments, each segment for attachment thereto of a respective magnet assembly, and each segment hinged to an adjacent segment by a hinge.

Claim 10 (original): The engine performance demonstration unit of claim 1, wherein said mechanism comprises a carrier for holding said aftermarket apparatus in a position spaced apart from a fuel line and thus does not influence the fuel in said fuel line, and wherein said carrier is movable to a position wherein said aftermarket apparatus is adjacent said fuel line.

Claim 11 (currently amended): The engine performance demonstration unit of claim 10, wherein said aftermarket apparatus comprises a three-part magnet, each said ~~bracket~~ magnet held is a respective metal frame.

Claim 12 (original): The engine performance demonstration unit of claim 1, further including a branched fuel line comprising a valve for switching fuel to either of two branches, one branch having said aftermarket apparatus coupled therein, and the other branch coupling fuel directly from said valve to said engine.

Claim 13 (original): The engine performance demonstration unit of claim 1, further including a catalytic converter switched into and out of operation with respect to exhaust gasses of the engine.

Claim 14 (original): The engine performance demonstration unit of claim 1, further including a load that is switchable into and out of operation with respect to said engine, said load providing a resistance to a torque produced by said engine.

Claim 15 (original): The engine performance demonstration unit of claim 1, wherein said mobile carrier comprises a wheeled trailer to which said engine is mounted for mobile movement.

Claims 16 - 20 (canceled)

Claim 21 (new): The engine performance demonstration unit of claim 1, further including a programmed processor for controlling said switch mechanism for switching said aftermarket apparatus into and out of operation.

5 Claim 22 (new): The engine performance demonstration unit of claim 1, further including a programmed processor for monitoring engine performance parameters, and providing a visual display of said parameters.

10 Claim 23 (new): The engine performance demonstration unit of claim 22, wherein said programmed processor stores the engine performance parameters and provides a visual display of the stored parameters.

 Claim 24 (new): The engine performance demonstration unit of claim 23, wherein said programmed processor is programmed to simultaneously display an engine performance parameter resulting from the aftermarket apparatus switched in and out of operation.

Appl. No. 10/460,585
Amdt. dated January 18, 2005
Reply to Office Action of January 4, 2005

Claim 25 (new): The engine performance demonstration unit of claim 24, wherein said programmed processor is programmed to calculate and display a difference between said engine performance parameters.